Oats

CONTRACT HANDBOOK

Technology Refreshment for 1994

Client/Server Architecture at Work

Windows NT Comes to OATS

Business Process Re-Engineering That Really Works

OATS Hardware, Software and Services

The OATS Program: An Overview

Welcome to OATS, the Office Automation Technologies and Services contract. Managed by AT&T, this comprehensive procurement vehicle supplies the Department of Transportation with state-of-the-art client/server systems and services to meet their emerging information management and training requirements.

We prepared this Handbook to give you a brief introduction to the OATS contract, the hardware, software, and services it makes available, and instructions on how to use the contract. And if you're already an OATS veteran and have used it before, you'll find the latest information on new offerings, recent changes in the program, and technology refreshment. Specifically, the Handbook offers information on:

- Client/Server Systems
- Professional Services Available on the Contract
- Business Process Re-Engineering Services from CACI
- Powerful Office Software from Microsoft
- Computer-Based Instruction and Course Conversion
- Maintenance Services
- The OATS Electronic Catalog

Contract History

AT&T was awarded the OATS contract in December 1989. It is a three-year contract with five one-year options and a maximum value (defined by the government) of $853 million.

The scope of the contract is quite large, encompassing both tier two systems (servers & LANs) and tier three systems (PCs) with related services. When it was first launched, OATS focused on meeting the office automation needs of personnel in the Department of Transportation. The emphasis was on PCs and PC software for individual users. As of 1993, the DOT has purchased more than 30,000 PCs through OATS. Today, the focus is on client/server systems supporting networks of users, databases, and applications.

Through OATS, you can obtain everything from: advanced PCs . . . software . . . networking components . . . plus all the services required to determine your requirements, re-engineer business processes, develop solutions for your entire systems life cycle, and meet your educational needs.

Customer Focused Teams from AT&T

One of the added values of purchasing a computing solution through the OATS contract is the business approach of AT&T. We employ Customer Focused Teams that gear all our activities to customer service. More than just meeting needs, we take every effort to delight our customers with capabilities and services that go above and beyond the normal call of project management.

A good example of this is our new Electronic Catalog. It's not required by the contract. And the FAA didn't expect to have such a convenient information resource available to so many potential users. But when the Agency recently implemented an E-Mail system, we saw an opportunity to cost-effectively supply information on OATS offerings to far more people at no extra cost to the FAA.

This effort was the work of many different people from different disciplines within AT&T who worked closely with staff at the FAA. Because we operate as a Customer Focused Team, we had removed the layers of what had been a "hierarchy chain of command" that could have stood in the way.

For More Information

We encourage you to read the rest of the 1994 OATS Handbook, which also includes valuable vendor information on OATS offerings. But if you need help right now, call 1-800-322-OATS, prompt #3. The OATS Customer Focus Team is ready to help today.

GOVERNMENT AGENCIES COME IN ALL SHAPES AND SIZES.

SO SHOULD THEIR INFORMATION SYSTEMS.

It's taking shape all over the world. Government agencies are discovering that the right information systems for them are the ones that make any sized job easier to handle. ◆ They've rightsized using Sun's complete line of open, networked SPARCstation™ and SPARCserver™ systems. ◆ That's because open systems — a concept we pioneered — unite your existing equipment with an easily managed network that puts information on the desktops of the people who need it. When they need it. ◆ From solutions for analyzing traffic patterns to document imaging to make tax return processing less taxing, you'll find that thousands of your favorite applications run on our SPARC®/Solaris® platform, which is also available for trusted environments. ◆ So if you're looking for help getting your information resources in shape, call 1 800 322-OATS, prompt 3. And try Sun on for size.

Sun Microsystems Federal, Inc.

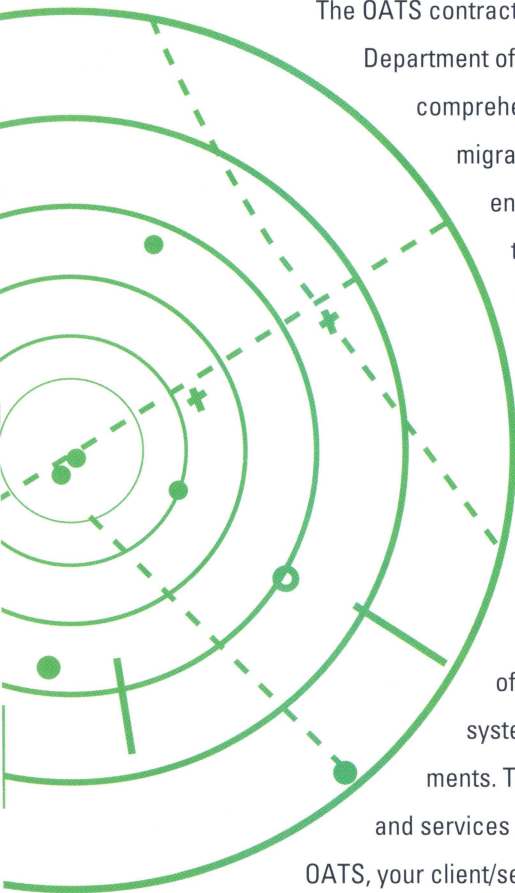A Sun Microsystems, Inc. Business

The Network Is The Computer.™

Client/Server Systems: Empowering the

C lient/server systems are changing the face of information management in nearly every government agency. More than a better way to process data, they "empower the desktop" by making applications, development tools, databases, and workgroup software available to end-users at unprecedented levels. As a result, client/server systems are arguably the key enabling technology for re-engineering the enterprise of government in the 1990s.

The OATS contract supplies the Department of Transportation with a comprehensive resource for migrating to client/server environments. Because the technology involved is so closely linked to your department's goals and strategies, the contract doesn't just sell "boxes." It provides solutions.

This assures you of acquiring the right system for your requirements. Through the products and services available through OATS, your client/server system will connect maximum productivity gains today and accommodate emerging technologies and changing organizational needs in the future.

What Makes Client/Server So Important?

The Federal government has never been under greater pressure to provide better services to citizens, even as budgets continue to shrink. That's why there are so many new federal initiatives: the National Information Initiative, the mandates to reduce paperwork and consolidate information systems, and the requirement to re-engineer the workplace for greater efficiency and productivity. All of these things have accelerated the migration to high-productivity client/server computing environments.

Until a few years ago, most government agencies relied on host mainframes, which supported computer terminals throughout the organization. Then PCs and workstations started taking over. To increase productivity, agencies today have networked these desktop systems in distributed computing environments. This is where client/server systems enter the picture.

Client/server systems increase data access by separating application functions into a "front-end" client component and a "back-end" server component. "Servers" provide users with transparent access to databases and applications wherever they may reside in the network, over different platforms and operating systems. They also perform database processing and protect data integrity. "Client" PCs, terminals, and workstations handle user interface with the server handling applications processing.

By separating these two functions, the only thing that travels over network lines is data. This reduces traffic loads and boosts network performance. At the same time, end-users achieve greater performance and can employ their

Desktop, Re-Engineering the Enterprise

computing resources far more efficiently. "The average cost of purchasing and operating a client-server system is just 10% of a comparable mainframe system," says Jamil Hermes, of AT&T's Custom Solutions Group. "That's a savings nobody can afford to ignore."

Your OATS client/server solution provides the interoperability to incorporate your existing computing environment and add new products as needed. So you won't have to start from scratch to obtain client/server benefits. For example, an existing mainframe can easily function as a server or as a repository for large databases. And no matter how many different vendors supplied your current inventory of PCs and workstations, your new system will work seamlessly with them as long as they continue to meet your requirements.

The Perfect Re-Engineering Tool

Originally established as an office automation contract, OATS has evolved into a sophisticated enterprise re-engineering program. For starters, it offers Microsoft's Windows NT, the operating system environment that supplies every end-user with the powerful "Windows" graphical user interface. Now, everyone on the network can use a mouse, graphic icons, drag-and-drop features, and an array of desktop management and personal productivity tools. OATS also makes available:

- Industry-leading database management system
- Office automation software
- Client environment-building software
- Network management software
- Middleware products to streamline workflow and support work teams.

With these products, plus the scalability of your client/server system, you'll have all the ingredients for re-engineering your workplace. Not only will you enhance existing service delivery, the tools and functions available through OATS will open up new ways for your department to conduct operations and achieve its mission.

And because so many functions can now be carried out instantly at the desktop level, many tasks will be completed in minutes rather than hours or even days. That means you'll accomplish far more with the same number of people.

A Full-Service Client/Server Resource

Although it's nearly five years old, OATS hasn't stood still. Through technology refreshment, it continues to make the best products available to you.

And so much more information is available to users! By the 21st century, data is expected to surpass voice in the volume of traffic carried over federal communications networks. Everything from engineering drawings and operations data to personnel records, library holdings, and maintenance histories will be online and accessible to everyone with a computer and a password.

Through OATS, you can obtain all the products and services you need to define the client/server system that's right for your organization, implement the new system, and train your staff to use it.

And don't think because AT&T is the contract manager that we offer a one-vendor solution. We reviewed products from over 20 of the leading client/server manufacturers and picked the best. You will be able to choose among servers from three different suppliers:

- Digital (both Alpha- and Pentium-based systems)
- AT&T (the full line of Intel-based chips, including Pentium)
- Sun (SPARC platforms)

"These servers support scalable architectures," says Hermes. "That means they'll meet your current needs. Then as your needs grow or more powerful processors become available, you can add to your network with no loss of service."

In addition, the contract offers a complete range of LAN and WAN hardware and software products to create or upgrade your existing network configuration. OATS client/server systems will support a variety of network topologies and protocols, including OSI, TCP/IP, IPX/SPX, and X.25. Plus, they are fully compliant with POSIX and GOSIP standards.

Interoperability That Leverages Your Existing Technology Investment

If your department is like most, it deploys a bewildering array of multiple computing platforms and operating systems from scores of vendors. And while new mainframes aren't on your shopping list any more, you invested too much in the old one not to keep it running as long you can.

"Flexibility is what client/server is all about. Users want their new generation of desktop applications on PCs and workstations to be able to coexist with the mainframe. Likewise, everyone should have the flexibility to develop and run applications on the platform of their choice," says Ken Mellett, VP Civil Sales, Oracle Government. "Through OATS, Oracle and other open, portable, distributed products make the migration to client/server as smooth as possible, while protecting your legacy investment."

When the contract began, it featured 386 chips, which are no longer powerful enough for today's needs. That's why we added powerful new servers, featuring Intel's 486 and Pentium chips, and RISC technology from AT&T, Digital, and SUN. Digital is another key player on OATS, providing powerful and scalable server platforms that include the Pentium-based DECpc XL Server 560 and the 64-bit Alpha AXP-based Digital 2100 Server A500MP.

In addition, the Oracle 7 RDBMS will soon be added, as well as Power Builder, an enhanced tool for building client environments.

As Jamil Hermes remarks, "These are the type of changes that have kept OATS the primary vehicle for supplying the Department of Transportation with the sophisticated client/server systems needed to meet the information challenges facing them as the 21st century approaches. Now these systems will play an even greater role as one of the driving forces behind re-engineering the federal workplace."

To find out how OATS can help you re-engineer the way your department works, dial 1-800-322-OATS, prompt #3. The OATS Customer Focus Team is standing by to take your call.
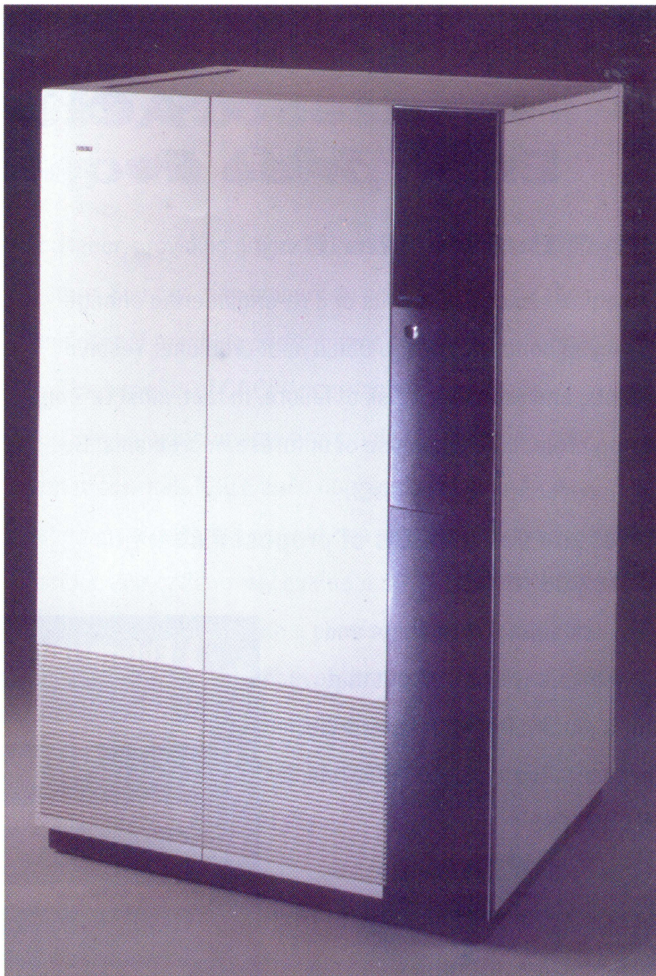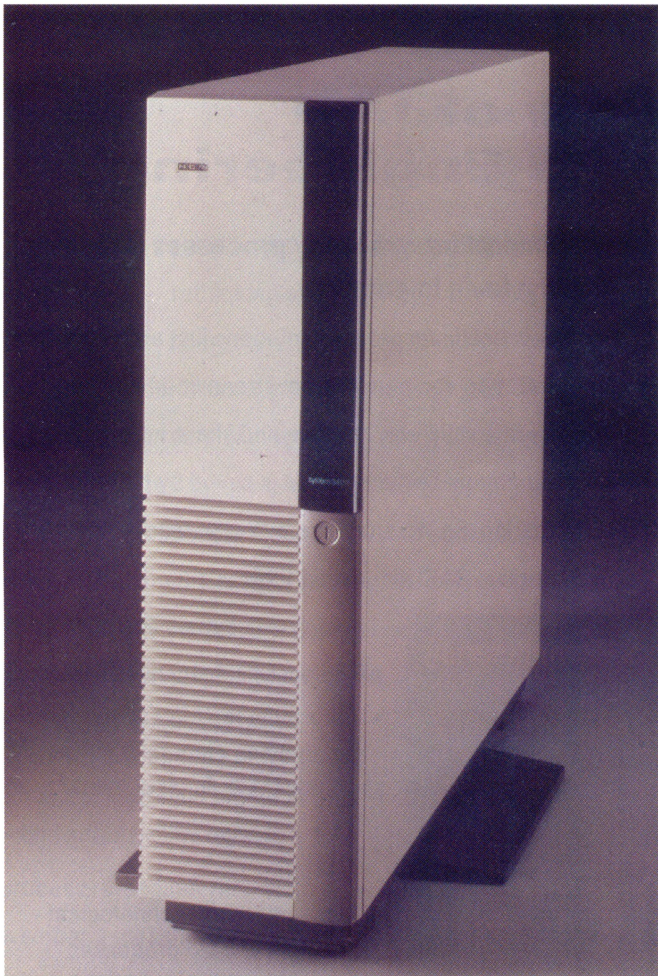
Expandable. Portable.
Not to mention fast and powerful.

(Who says you can't have everything?)

Two new server products offer everything you need to manage your organization's growth and change – the 3455 and 3525 from AT&T. Based on Intel's Pentium™ chip, the AT&T 3455 and 3525 are symmetrical multiprocessing (SMP) systems with the power, performance, speed, and flexibility to meet your needs both now and in the future.

The 3455 is a deskside system providing superior performance, throughput, and processing scalability. Powered by up to six Pentium microprocessors, the 3455 offers in-box expansion capabilities designed to deliver a superior upgrade path. You'll also get significant scalability in terms of memory (up to 1 GB), internal disk/storage drive bays (up to 9), and LAN/WAN connections.

The 3525 is a powerful multiprocessing server designed for online transaction processing and decision support applications. Expandable to eight Pentium processors, the 3525 can handle large complex databases while delivering exceptionally fast response time to users. A high-performance, industry standard bus supports a wide range of SCSI devices, LANs/WANs, and TTY terminals. There's also substantial system scalability – up to 2 GB of memory and up to 64 internal disk/storage drive bays.

Both the 3455 and the 3525 let you choose between the most popular industry standard open systems, including AT&T UNIX SVR4 MP-RAS and Microsoft Windows NT™ Advanced Server. Looks like you really can have everything. To find out more, call us today at 1-800-322-OATS, prompt #3.

AT&T
Global Information
Solutions

GET move USE IT.

CACI's View of Enterprise Process Re-Engineering

"Fly" Before You Buy

Imagine seeing the results of a re-engineering change before you commit to it. You could spot problems, resolve conflicts, and reduce the risk of failure. In fact, most re-engineering projects fail because of unforeseen problems. But that doesn't happen with CACI.

We let you see impacts of proposed changes before you invest.

No, we don't get on stage and act them out. But you do get that clear a picture from our Enterprise Process Re-Engineering (EPR) tool, SIMPROCESS™.

This unique tool simulates processes with animation while measuring the costs, time, and output of activities. So you can:

- See the actual flow of work and measure what it means
- Watch the interrelationships of activities and processes
- Explore ways to improve processes and test their viability
- Gain insight into the effects of change throughout your organization.

And you can keep refining a process until you're fully satisfied that the best changes have been found.

Visualization is so valuable, why would anyone re-engineer without it?

Certainly, in serving the FAA and other customers we've revealed obstacles to proposed changes that could not have been anticipated through other forms of analysis. And by seeing those obstacles, you can:

- Avoid investing in processes that are destined to fail (save money!)
- Find solutions that will work and find them faster (save time!)
- Base decisions on hard data, not conjecture (reduce risk!)

Enterprise Process Reengineering

1 Visualize Current Processes
2 Compare Process Alternatives
3 Develop New Processes
4 Derive Integrated Solutions

SIMPROCESS™

Just as important, we study processes and information systems in parallel...

...because sometimes process solutions just aren't obvious. Your organization can benefit from streamlined activities but will also need a solid way to move and share information. Often, the path to a better process is paved by better use of that information. So we study the two in parallel – again, using distinctive CACI simulation tools.

Using those tools and our disciplined analytical techniques, you can:

- Determine the logical priorities for studying change
- Zero in on the high-cost areas where change will yield the highest return
- Pinpoint which technological changes will aid processes
- Build a detailed, realistic business case for change
- Evolve a reliable technology plan faster and more affordably.
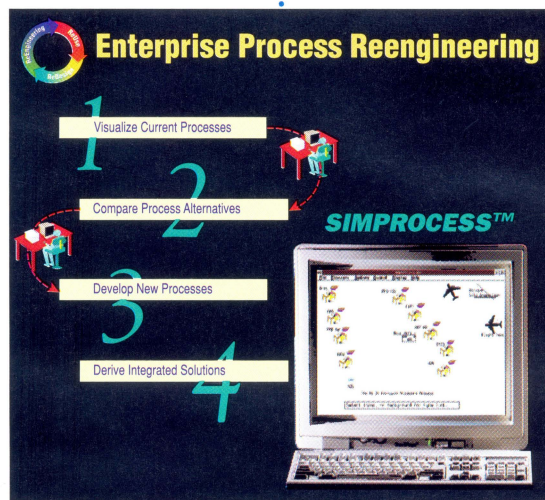
CACI has the start-to-end solutions for re-engineering your entire enterprise.

And they're readily available through the FAA-OATS contract. So when you need to re-engineer your organization, save your time and money, and reduce risk, call us on the OATS Hotline 1-800-322-OATS, prompt #3.

Learn more within this catalog about CACI's view of Enterprise Process Re-Engineering.

CACI

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CACI – Business Process Re-Engineering on OATS

Business process re-engineering (BPR) means rethinking and rebuilding an organization's operations. Its goal is to improve critical performance areas so dramatically that productivity rises by orders of magnitude.

As the name implies, business re-engineering is a process, not a specific technology. And as such, it does not always give you the results you expect. In fact, as many as 70% of BPR efforts fail. Because while just about anyone can dismantle your current environment, few can put the pieces back together to yield meaningful change.

A Proven Approach to BPR

CACI is focused on removing the risk from business process re-engineering. With proven capabilities and tools, we offer a measured, orderly method for managers to understand the current environment and to explore alternative ways to improve it. The key ingredient is a tool that no other company can offer – SIMPROCESS™.

Created by CACI engineers, SIMPROCESS is a distinctive electronic prototyping tool that lets you simulate your organization's current procedures and explore the consequences of other approaches. With SIMPROCESS, you can literally see how your operations are or are not working together. You can see how quality, productivity, services, budgets, and schedules are affected when systems fail, staffing is cut, and work is automated. You can then alter any portion of the process, watch the effect, and alter it again until the optimum procedure is achieved.
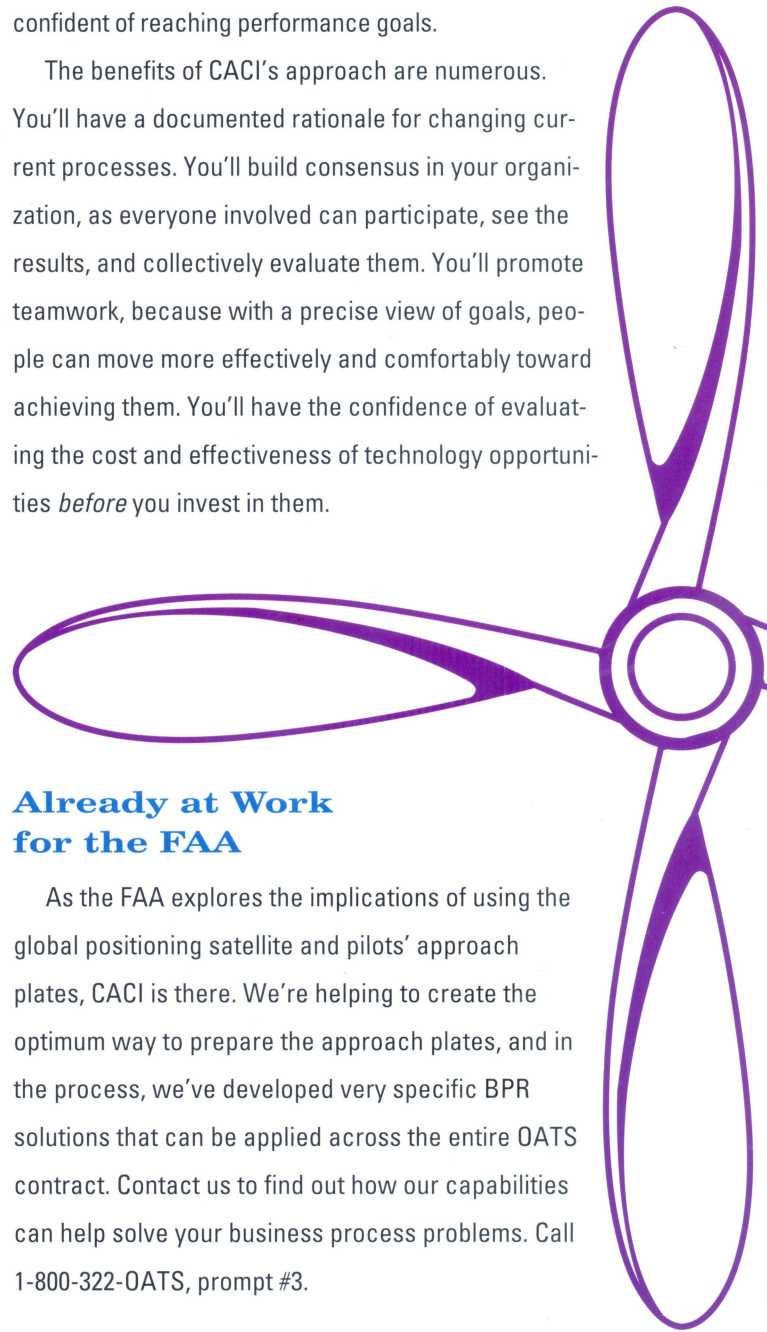
Besides providing a risk-free view of change, SIMPROCESS lets you affix resources to processes. Both old and revised approaches can be compared for savings in cost, time, and labor, providing quantified, verifiable data that replace conjecture. You can then embark on critical redesigns far more confident of reaching performance goals.
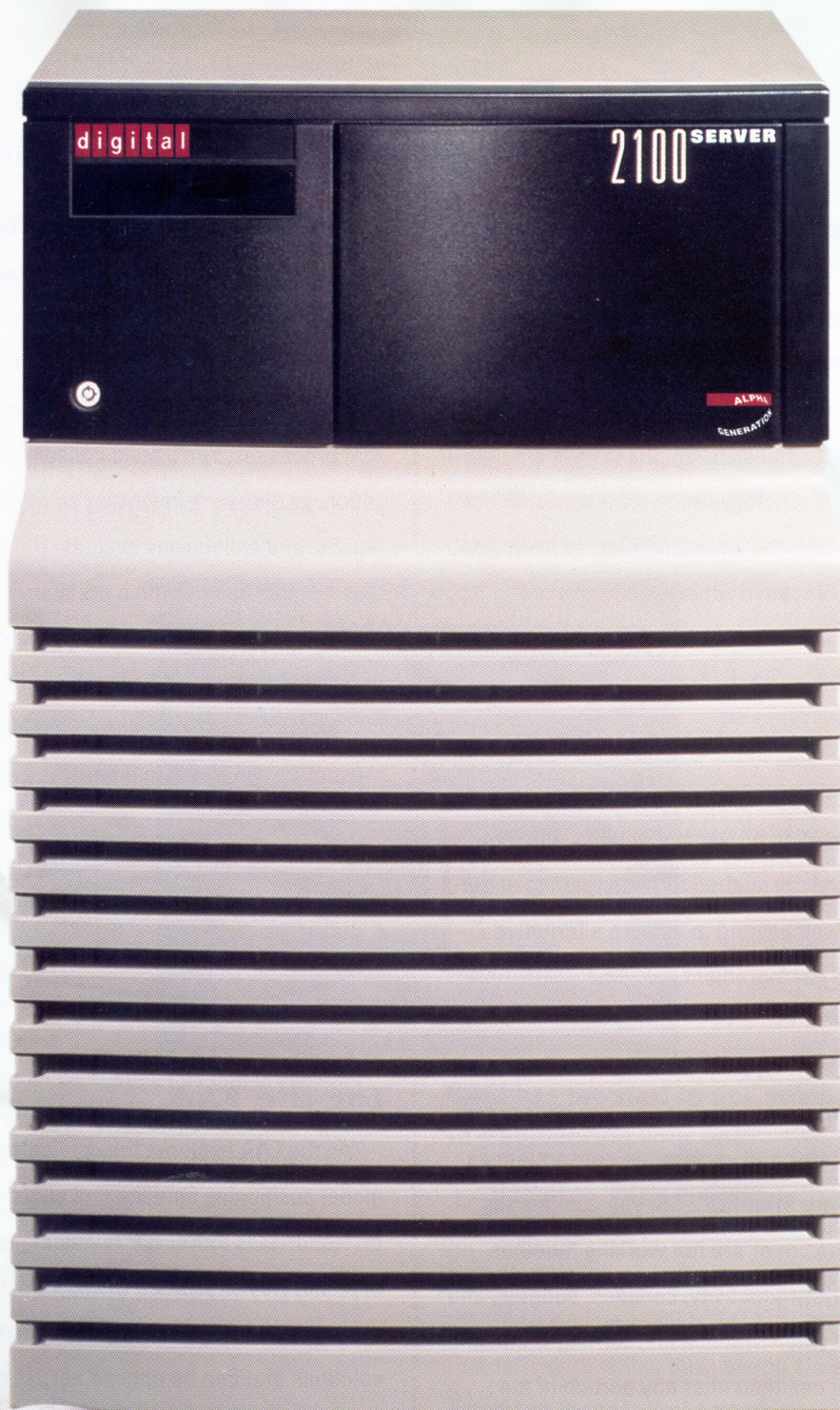
The benefits of CACI's approach are numerous. You'll have a documented rationale for changing current processes. You'll build consensus in your organization, as everyone involved can participate, see the results, and collectively evaluate them. You'll promote teamwork, because with a precise view of goals, people can move more effectively and comfortably toward achieving them. You'll have the confidence of evaluating the cost and effectiveness of technology opportunities *before* you invest in them.

Already at Work for the FAA

As the FAA explores the implications of using the global positioning satellite and pilots' approach plates, CACI is there. We're helping to create the optimum way to prepare the approach plates, and in the process, we've developed very specific BPR solutions that can be applied across the entire OATS contract. Contact us to find out how our capabilities can help solve your business process problems. Call 1-800-322-OATS, prompt #3.

Distance Learning: Tra

Distance Learning is rapidly emerging as an economical alternative to meet training needs in the workplace. Today, the FAA's Distance Learning Program is expanding to provide more employees access to technical and management training courses at their work location, reducing the need to travel to a centralized training center. Through Computer-Based Instruction (CBI) and Interactive Video Teletraining (IVT), the FAA can provide expert training systems while reducing annual costs. The OATS contract supplies technologies and services to support Distance Learning initiatives within the Department of Transportation.

Through the OATS contract, AT&T offers two major components required for a Distance Learning Program:

- A state-of-the-art, multimedia, computer platform for developing and delivering Distance Learning via CBI
- A consortium of industry specialists to analyze training needs, convert training materials for presentation via Distance Learning, and integrate the CBI and IVT technologies used in Distance Learning

Distance Learning Consortium: A Center of Expertise

The cornerstone of a successful Distance Learning Program is to design interactive courses that are effective and interesting. To meet your Distance Learning needs, AT&T gathered some of the finest course developers in the country and formed an alliance, now called the FAA/AT&T Distance Learning Link. Through OATS, AT&T and its consortium members offer a variety of professional services geared to developing and implementing a complete Distance Learning Program. These can include the selection of training media, requirements analysis, systems integration, train-

er instruction, project management, and technical support for the entire range of activities involved in Distance Learning.

According to Donna MacDonald, AT&T's Distance Learning Project Manager, "this team of experts brings together imaginative graphic artists, animators, instructional designers, and Authorware Professional programmers to produce highly interactive, motivational, and visually exciting Distance Learning courseware. And this synergy of talents is capable of very fast turnarounds."

Through the OATS contract, you can tap into the FAA/AT&T Distance Learning Link consortium for course conversion skills and talents, including:

- Instructional technologies
- Scriptwriters and storyboarders
- Graphic design and production
- Video production
- Authorware Professional development.

Authorware: The Best Choice for Distance Learning Course Development

CBI course developers have one of the finest course development software packages available to them via OATS: Authorware Professional from Macromedia.

The FAA selected Authorware for a number of reasons. The Windows-based package has an icon-based interface, making courseware development easy. Its robust graphics and multimedia capabilities help developers create interactive, state-of-the-art CBI courses, and IVT presentation materials. And Authorware Professional allows developers to incorporate computer animation into courseware, providing the FAA with a powerful instructional tool. Using this pack-

ining in the Workplace

age, the FAA can readily design comprehensive training courses which are creative, interesting, and effective.

Authorware is already installed at 100 FAA sites. Through OATS, AT&T will help you acquire Authorware Professional, develop an Authorware-based course development program, and train your Authorware programmers.

The OATS Multimedia CBI Platform

The OATS contract is your source for state-of-the-art, multimedia workstations designed specifically to meet the Distance Learning requirements of the FAA.

Distance Learning technology has advanced significantly since AT&T won the OATS contract in 1989. "To respond to these changes," says Walt Smith, AT&T's Multimedia Systems Engineer, "AT&T partnered with the FAA to develop a comprehensive multimedia CBI solution, which included a specifically configured workstation." Platform standardization was very important to the FAA, yet the design had to provide maximum flexibility to meet current and future CBI needs.

The CBI platform is capable of running video, videodisc audio, 3-D animation, high-resolution graphics, and digital audio. "These platforms are very sophisticated," notes Smith. "AT&T studied emerging technologies to determine the direction of the industry and then measured these technologies using the FAA's requirements as a yardstick." AT&T found that they could integrate leading-edge components to design a multimedia platform that meets industry standards and will support the FAA's CBI needs for many years. "The flexibility of the design was one of the key selling points," says Smith. "During the design phase we planned for special needs, such as connectivity to keyboards used in cockpits."

The agency accepted the solution in 1992 and has deployed approximately 1000 workstations nationwide, with plans to deploy another 600 workstations in the next few months. Virtually all FAA facilities are scheduled to receive these multimedia systems and the courseware that runs on them.

Interactive Video Teletraining: Integrating Technologies

Interactive Video Teletraining is the latest development in the FAA's Distance Learning Program. The Agency's interest in this high-productivity training technology is spreading quickly. "Basically, IVT combines CBI and satellite communications to create an interactive training experience for students and instructors," remarks Walt Smith. IVT training will be conducted via a one-way video transmission to students and a two-way audio link between students and the instructor, allowing students to ask questions as they work through the course material. Instructors will utilize the multimedia capabilities provided through OATS to incorporate computer-generated graphics, animation, and practice exercises into the course.

"The integration of multimedia CBI and satellite communications is a fabulous use of technology," says Smith. "The communications equipment and satellite link are not available through OATS. But the Department of Transportation can use the consortium to convert resident courses to IVT courses and make full use of the multimedia capabilities already available with CBI."

Distance Learning is new to many federal employees, but it offers the opportunity to bring one-on-one learning to more people. Call your OATS contracting office to find out more about this useful technology at 1-800-322-OATS, prompt #3.

Technology Refreshment – Keeping OATS Current

We strive to keep OATS up to date with today's most current technology. The recent technology refreshment adds these configurations to the contract:

DEC 560pcxl Pentium Server

Three configurations are available, all of which offer a 60 MHz Pentium processor, EISA and PCI Bus, on-board PCI SCSI controller, on-board video controller, 512 Kb video RAM, 256 Kb cache, 1.44 MB floppy, parallel port, 2 serial ports, 300 W power supply, CD-ROM, SVGA 15-inch color monitor, keyboard, mouse, Ethernet 10BaseT adapter, documentation, and a three-year on-site warranty. Three different configurations let you choose between these options:

1) 32 MB RAM and 1 2GB hard disk
2) 64 MB RAM, 2 2GB hard disks, EISA SCSI controller, Windows NT Advanced Server Operating System, and 4mm DAT tape drive
3) 128 MB RAM, 3 2GB hard disks, EISA SCSI controller, Windows NT Advanced Server Operating System, 4mm DAT tape drive.

Sun SPARCstation 5

Three configurations are available, each of which features an 85 MHz microSPARC II processor, one integrated SCSI controller, one integrated Ethernet controller, one 1.44 MB floppy drive, CD-ROM, keyboard, mouse, Motif user interface, Solaris 2.3 Edition II, documentation, and a three-year on-site warranty. The three configurations available add:

1) 32 MB of RAM, 36 Kb cache, 1.05 GB hard disk, and 20-inch color monitor
2) 64 MB of RAM, 36 Kb cache, 1.05 GB hard disk, and 20-inch color monitor
3) 64 MB of RAM, 36 Kb cache, 4 GB of hard disk space, 15-inch color monitor, one SCSI II/Ethernet adapter, and 4mm 5GB DAT tape drive

Sun SPARCstation 20

Three configurations are available, each of which includes one 60 MHz RISC CPU with 1 MB cache, North America Kit (provides keyboard and optical mouse), one integrated SCSI controller, two internal 1.05 GB disks, one internal CD-ROM, one 3.5-inch floppy disk drive, integrated 10BaseT Ethernet, Solaris 2.3 operating system, Motif user interface, documentation, plus a three-year on-site warranty. The three configurations available add:

1) 64 MB of RAM, one external 2 GB disk, and 20-inch color monitor
2) 128 MB of RAM, one external 2 GB disk, and 20-inch color monitor
3) 128 MB of RAM, three external 2 GB disks, 17-inch color monitor, one SCSI II/Ethernet adapter, and one 4mm 5 GB DAT tape drive

Proposed Technology Refreshment

These departmental processing systems have been proposed for the OATS contract. As we go to press, they have passed technical review and are in negotiations.

DEC 2100 AXP Server

Three configurations are proposed, all of which offer 1 MB cache, 2.88 floppy, CD-ROM, 17-inch monitor, keyboard, mouse, and 10BaseT adapter. The three different configurations are designed to let you choose the right system for you, with the most powerful option offering OSF/1, 2 190MHz Alpha processors, 256 MB RAM, 8 GB of hard disk, 2 SCSI controllers, and 4mm DAT drive.

Sun SPARCcenter 2000

Two configurations are proposed, the largest of which would include 4 RISC CPU's, 8 MB cache, 512 MB RAM, SCSI, 17.4 GB of hard disk, CD-ROM, 4mm tape drive, Solaris 2.3, 20-inch monitor keyboard, and mouse.

AT&T 3455

Three configurations are proposed, all of which would offer 2 66MHz Pentium processors, 4 GB of hard disk, 15-inch monitor, 2 SCSI controllers, mouse, keyboard, CD-ROM, 3.5-inch floppy, 320/525 QIC tape drive, and Ethernet controller. The most powerful option would also include 128 MB RAM and UNIX SVR4 MP-RAS.

AT&T 3525

Three configurations are proposed, all of which offer 15-inch monitor, 2 SCSI controllers, mouse, keyboard, CD-ROM, 3.5-inch floppy, 320/525 QIC tape drive, and Ethernet controller. The largest option would include 4 66MHz Pentium processors, 256 MB RAM, 8 GB of hard disk, and UNIX SVR4 MP-RAS.

CACI's View of Enterprise Systems

Avoid Building New

The need to re-engineer business processes is practically a given these days. But when it's time to implement changes – especially technical ones – you may face a Catch 22. You probably can do more with newer hardware. But if you have to build all new software to drive it, you probably can't do more for less. And the more complex, critical, or outdated your systems are, the more costly new software gets. So CACI does something different.

We save the good parts of your old systems and reuse them.

And we do so with a fully defined, proven process that we call RENovate™. It lets us save your old systems' functional logic – the workable parts that still satisfy your business process needs – and re-engineer it into reusable software objects. Then, by reusing those objects, instead of building from scratch, we can:

- Cut software development costs as much as 50%
- Speed time to resulting systems by up to 50%
- Improve system quality enough to slash maintenance costs as much as 75%.

And you get the benefit of new technologies.

RENovate is a highly flexible way to add new functionality to your system, as well as:

- Migrate from any starting point to any targeted environment
- Exploit system design techniques (information engineering, object oriented, etc.)
- Add relational databases, off-the-shelf products, or other new technologies
- Integrate your renovated systems into open environments.

System Revitalization

RENovate™ Methodology

Technical Assesment · Decomposition · Reconstitution · Generation · Validation · Operation

Source Code · New Functions · New Platforms Technologies · Test Plans · Documentation · Training

Quality Management

This is a high-return, low-risk process.

And we do mean process. RENovate is not an automated tool that just converts old code to new. It's a structured software re-engineering methodology whose results have been measured, confirmed, and consistently repeated over the last five years. So while it's unique (no one has yet imitated its results consistently), RENovate is a completely reliable and open process. So reliable, we can safely use it on even 20-year-old technologies that are critical to supporting effective airspace systems.

### There's more to implementation than saving old systems.

So we bring more to your table. CACI has the discipline, knowledge, and talent to put together the right technical solution for you and work out all the details of implementation. From business process redesign to application development and systems integration, we get your whole organization where it needs to be faster, better, and more affordably.

CACI has the start-to-end solutions for re-engineering your entire enterprise.

And they're readily available through the FAA-OATS contract. So when you need to re-engineer your organization, save your time and money, and reduce risk, call us on the OATS Hotline 1-800-322-OATS, prompt #3.

Learn more within this catalog about CACI's view of Enterprise Systems.
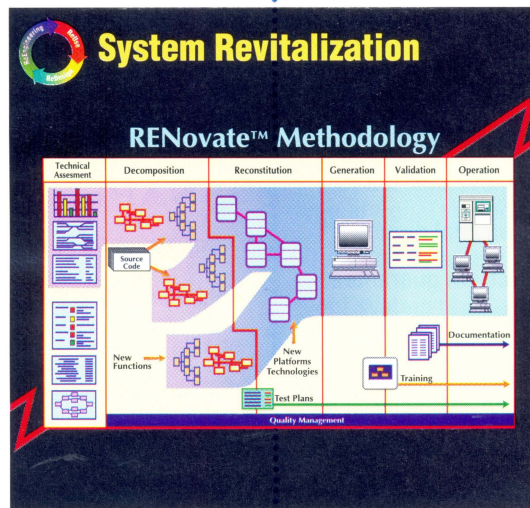
CACI

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Professional Services –
The People Behind the Technology

What are Professional Services? Quite simply, people – highly talented, experienced professionals with the knowledge and expertise to answer any question and solve any problem you may have with your existing or future computing system. We'll help you get where you want to go by listening to your concerns and analyzing your needs and environment.

Why AT&T?

The OATS contract provides the Department of Transportation a single point of contact for easy ordering, rapid response, and proven performance. It's a vehicle specifically created for the DOT for the convenient delivery of a wide range of professional services.

Our number one commitment is to go beyond simply satisfying our customers. AT&T's corporate goal is to delight our customers in everything we do. To help achieve this, we've created Customer Focused Teams (CFT). You deal directly with your CFT to resolve any problem. In fact, we guarantee that your CFT will provide service with which you are pleased.

Service Offerings

AT&T offers comprehensive technical and professional support services that are fast, flexible, reliable, and cost-effective. The major components of our Professional Services include: *Business Process Re-Engineering, System Life Cycle Solutions, Educational Services,* and *Special Needs Access Program.*

Business Process Re-Engineering

We're helping the FAA in its ongoing efforts to improve operational efficiency by examining work flow. By re-examining data needs, organizations can increase productivity, unleash the creativity of front line employees, and improve employee and customer satisfaction.

System Life Cycle Solutions

AT&T's creative solutions produce real time and money savings. They also offer unmatched flexibility. You can select a single Professional Service, or use the entire suite of Life Cycle Support services for the life of the program. Services include: *Configuration Analysis, System Integration, Project Management, System Administration,* and *On-Site Support.*

Educational Services

Our Educational Services include custom training programs with group or one-on-one instructional seminars developed and delivered to meet your organization's unique needs. We handle everything – needs analysis, flexible scheduling, customized course materials, instructor-led classroom training, seminars, executive briefings, and follow-up hotline support.

Special Needs Access Program (SNAP)

SNAP offers consultation, needs assessment, integration engineering, training support, and maintenance services to enable individuals with disabilities to make more efficient use of their computers and work environment. Helping the Department of Transportation and other agencies meet the Americans with Disabilities Act and Section 508 of the Rehabilitation Act requirements, SNAP brings together products from dozens of vendors and adds the value of one-stop shopping.

What's New – Sample Statements of Work

To make it easier to order Professional Services, the FAA has created sample Statements of Work (SOWs). Available on diskette, sample SOWs are templates representing typical work performed under OATS Technical Support Services. Sample SOWs serve as guides to creating your own statements of work.

For more information regarding Professional Services, call 1-800-322-OATS, prompt #3.

Maintenance Protects Your OATS Investment

Wondering what's the best way to protect your investment in OATS systems? The answer's easy: order OATS maintenance. It's the one way to ensure that your OATS systems are available when you need them and that they operate at peak efficiency. All OATS systems are warranted for two years and in some cases three. During this period, AT&T Global Information Solutions provides full hardware and software support and repair service, including parts and labor. Although purchase of hardware maintenance through the OATS contract is optional, it's the easiest and safest way to protect your OATS systems. You can simply issue a delivery order for maintenance to receive:

- Consistent, uninterrupted hardware and software support from the experts – the AT&T Global Information Solutions Maintenance Organization
- Guaranteed timely problem response and resolution
- Hardware repair or replacement, including all parts and labor.

Technical assistance and help in determining the root cause of your trouble will be provided by the OATS Hotline. As an integral part of AT&T Global Information Solutions Maintenance Organization, the OATS Hotline can often resolve both hardware and software problems with a single phone call.

Specially trained analysts at the AT&T Global Information Solutions Maintenance Organization will quickly respond to all trouble reports and maintenance requests. Mike Abatemarco, Manager of the AT&T Global Information Solutions Tier II Maintenance Organization, states, "Our goal is to respond to calls via telephone within 15 minutes and to immediately begin the process of trouble isolation and reso-

lution. In most cases, analysts will diagnose and resolve problems on-line by walking you through simple maintenance, operational, and recovery procedures." If resolving the problem requires on-site assistance or hardware repair, a local customer engineer will be dispatched to your site.

If the problem cannot be resolved by the Tier II analysts, it will be escalated to the OATS Tier III Technical Organization. Here system integrators and developers will address and resolve even the most complex problems, tapping the resources of AT&T Global Information Solutions and Original Equipment Manufacturers (OEM). Analysts at the AT&T Global Information Solutions Maintenance Organization will closely monitor all problem resolution activities and keep you informed of the status of the problem until it is completely and satisfactorily resolved.

With AT&T Global Information Solutions Maintenance, you are guaranteed timely problem response and resolution. Our commitment is to be on-site within 4.5 hours and have your system repaired within 12.5 hours. According to Mitchell Lloyd, AT&T Global Information Solutions Maintenance Manager for OATS, "Our goal is to delight OATS customers by consistently exceeding their expectations for quality service."

In addition to problem resolution, hardware maintenance includes all parts and labor to keep your OATS systems in optimal working condition. The equation is simple: AT&T Global Information Solutions Maintenance equals maximum system availability and optimal performance. To ensure that your OATS systems continue to work for you, be sure to order maintenance coverage.

Microsoft –
Powerful Software for OATS

The increasing demands on the Department of Transportation call for an operating system that is powerful, reliable, and open. And that's exactly what you get with Microsoft Windows NT and Windows NT Advanced Server.

What makes Windows NT the network operating system of choice? Features like 32-bit architecture, fault-tolerance, multithreading, and true multitasking. There's support for multiple processors and C2-level security. Not only that, Windows NT is the perfect platform for developing and hosting client/server applications. And when used in conjunction with such products as Microsoft Access and SQL Server for Windows NT, you get the added advantage of exceptional price-performance on the NT platform.

Windows NT is also easy to administer, and is easily integrated in the NetWare environment. And now Windows NT is available either as a packaged product complete with documentation, or as a license-only option at a reduced price.

Refreshment –
Keeping OATS Current

All of the Microsoft desktop applications on OATS have been refreshed. The latest versions of all products are now available, including Windows for Workgroups, Word 6.0, Excel 5.0, Powerpoint 4.0, Project 4.0, and MS-DOS 6.x.

What's different in the new products? They're easier to use, owing to such technologies as Intelligence, Cue Cards, Wizards, autocorrect, and autoformat; improved translations to and from WordPerfect; and superb cross-product integration, including the powerful programming language Visual Basic for Applications, which is the foundation for all of the products.

There are also new ways to save money. For example, it's very cost-effective to upgrade to Microsoft Office, as opposed to individual upgrades for Word and Excel. And with

Office, you also get Powerpoint, the outstanding business presentation software from Microsoft. Our Office Pro package adds Microsoft Access to the package. As with Windows NT, you can purchase these as packaged products with documentation, or as a license-only option at a reduced price.

New Ways to Get Microsoft Product Information

For OATS users Microsoft now offers the TechNet CE – 100,000 pages of highly detailed technical information, including the Microsoft Knowledgebase, the same library of technical support information used by Microsoft support personnel to answer customer questions. Also included are technical whitepapers on such topics as WOSA, Windows NT, OLE, ODBC, and MAPI; Resource Kits; tips, tricks, and techniques; product and technology descriptions; educational materials; technical conference session notes; and the Microsoft Services Directory.

There's also the Developer Network CD, a comprehensive source for programming information on all Microsoft development tools and products. This CD contains thousands of pages of new technical articles, sample code for more than 700 applications, product documentation, bug reports, technical specifications on WOSA, MAPI, ODBC, DPMI, OLE, LSAPI, Sockets, and MRCI, as well as Microsoft Press books online.

What's more, you can now reach Microsoft on the Internet at **tfp.microsoft.com**. Microsoft hosts a Windows NT Advanced Server with tens of megabytes of information, including recent drivers, patches, technical notes, and whitepapers on all technologies, both at the client and at the server.

Important Microsoft Numbers:
Customer Service: 800-227-4679 or 800-MS-WINDOWS
Microsoft Download Service: 206-936-6735
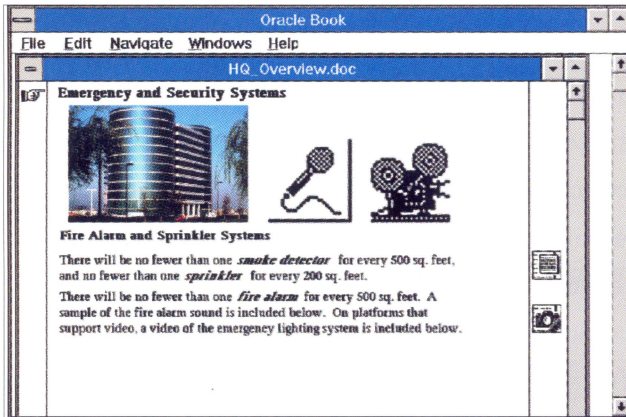**Fax-Back Information Service: 800-227-4679**

Oracle CDE.
# Build multimedia applications anywhere.
Deploy them everywhere.

Windows

This application was designed in Windows, then deployed on Windows, Motif, Macintosh, and even Character terminals without any programming.

"CDE's portability has been a great advantage to us, having developed the original system on UNIX we were able to port with no additional code to Microsoft Windows. It also allows us to offer the system to a much wider user base than if it had been available for only one of these environments."

Chris Nicholls
Manager IS Dev.
British Telecom, UK

Motif

Character Terminal

Macintosh

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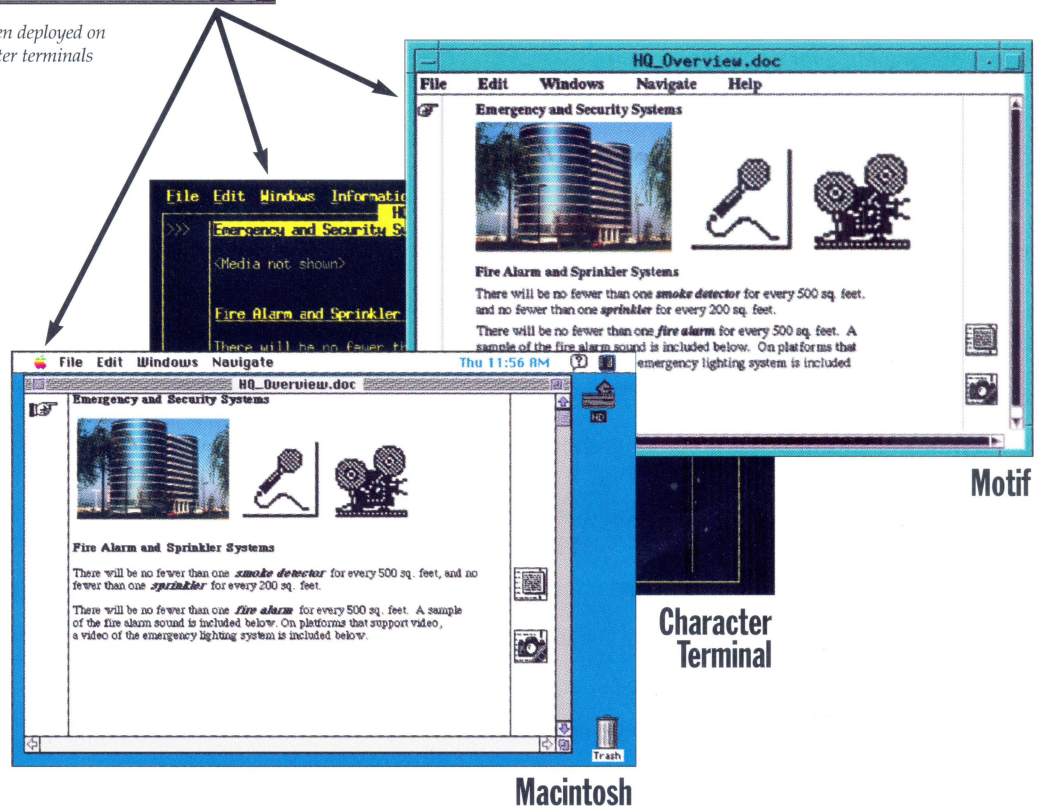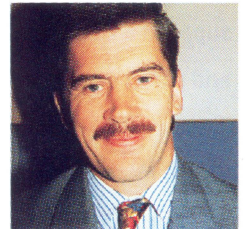
CDE is a complete and integrated suite of application design and modeling tools that empowers system designers, programmers, and end users to cooperate in building client/server applications quickly. CDE's CASE design, development, and graphical reporting tools eliminate extensive programming to help speed and simplify your application development efforts.

For more information on Oracle's Cooperative Development Environment call 1-800-322-OATS, prompt #3.

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